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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, CHAU T

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/454,515

Applicant(s)

LONNROTH ET AL.

Examiner

Chau Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. Amendment C, filed on 08/21/03, has been entered. Claims 1-37 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 8-11, 14-17, 21-24, 27-30, and 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagatomo et al. (Nagatomo), Patent No. 6,334,126, and further in view of Lincke et al. (Lincke), Patent No. 6,397,259.

4. As to claim 1, Nagatomo discloses a method for retrieving information from one or more data sources, the method including the steps of:

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receiving, from a particular type of client, a request for a service (col. 6, lines 20-24: a search requester 8 (from a PC 4, a PDA 5 or a telephone 6) who requests a search of the database 1);

wherein said request for said service is received at a system located separately from said client (col. 5, lines 61-63: the server 2 analyzes the search request sent over a network 3 by the search requester 8);

wherein said request is sent by a particular user (col. 6, lines 20-24 the search requester 8 is from either a PC, a PDA or a telephone);

wherein said first set of parameters includes identity of said service (col. 8, lines 5-9: the requesting communication terminal 4, 5, or 6 requests the server 2 to make a search by informing the contents of the server request such as the search range and a keyword (parameter identifies the service));

said system transmitting requests to one or more data sources (col. 5, lines 54-63 and col. 10, lines 4-44: the server 2 analyzes a search request sent over a network 3 by a search requester 8, and accesses the database 1 (data source) to acquire a search result);

at said system receiving responses to said requests from the one or more data sources in one or more formats other than a particular format (Abstract, and col. 8, lines 11-57: database 1 (data source) holds data of plural types of data formats);

at said system converting the responses into said particular format (Abstract, and col. 10, line 30 – col. 11, line 35: the server receiving the results from the database 1,

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and performing conversion and edition on the search result in accordance with the ability, function and/or capacity of the requesting communication terminal);

at said system generating, based on the responses, a composite response document in said particular format (col. 5, line 64 – col. 6, line 2, col. 6, lines 39-42, and col. 10, line 30 – col. 11, line 35: the server 2 converts the search result to another data format in accordance with the ability or functions of the communication terminal at the destination);

at said system transforming the composite response document into a client-formatted response based on a second set of parameters (col. 6, lines 49-53, col. 7, lines 4-57, and col. 8, line 58 – col. 9, line 7 and Fig. 2A: the communication terminal 4, 5, or 6 informs the server 2 of its own ability and functions (type of the communication terminal such as PC, PDA, or telephone) so the server will convert data receiving from database 1 to the type of the communication);

wherein said second set of parameters includes identity of said particular type of client (col. 6, lines 49-53, col. 7, lines 4-57, and col. 8, line 58 – col. 9, line 7: a terminal identification (ID) code is reported to the server 2 and the server 2 will recognize what communication terminal type to convert data to that type); and

at said system transmitting said client-formatted response to said particular user (col. 6, lines 49-53, col. 7, lines 4-57, and col. 8, line 58 – col. 9, line 7, col. 10, line 30 – col. 11, line 35:);

However, Nagatomo does not disclose said system generating, based on a first set of parameters, a request object. In the same field of endeavor, Lincke discloses

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transmitting a first message (request) in packets of data from a client to a server, transforming the first message into a standard object data request, and transmitting the standard object data request to the source of data (col. 5, lines 9-65). Since Lincke teaches a wireless communications system providing packet minimized communications between a wireless client and a proxy server, which is similar to a process of a communication terminal when a search requester requests a search for information in a database and the search result is returned to the search requesting communication terminal of Nagatomo, thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lincke and Nagatomo to include generating a request object based on a set of parameters. Lincke suggests that generating a request object to represent a form used for querying web server.

5. As to claims 2 and 5, Nagatomo and Lincke (Nagatomo-Lincke) disclose the steps of embedding within said request object one or more filtering criteria, and filtering data from said composite response document based on said filtering criteria prior to transforming said composite response document (Lincke, col. 5, lines 9-65).

6. As to claim 3, Nagatomo-Lincke disclose wherein one of said requests invokes a search mechanism at a data source based on a first set of search criteria (Nagatomo, col. 2, lines 9-34 and col. 7, line 55 – col. 8, line 17); and

the step of filtering data includes filtering data that originated from said data source based on a second set of search criteria (Nagatomo, col. 2, lines 9-34 and col. 7, line 55 – col. 8, line 17).

7. As to claim 4, Nagatomo-Lincke disclose wherein said first set of parameters for generating the request object includes identity of the particular user (Nagatomo, col. 6, lines 49-58, col. 7, line 15 – col. 8, line 63).

8. As to claim 8, Nagatomo-Lincke disclose the one or more data sources include a first data source that supports a first protocol and is accessible through a first gateway, and a second data source that supports a second protocol and is accessible through a second gateway (Nagatomo, col. 18, lines 25-67; Lincke, col. 9, lines 30-47, col. 11, lines 8-25 and col. 14, lines 48-64);

and the step of converting the responses into the particular format includes the first gateway converting a response from the first data source to the particular format; and the second gateway converting a response from the second data source to the particular format (Nagatomo, col. 18, lines 25-67; Lincke, col. 9, lines 30-47, col. 11, lines 8-25 and col. 14, lines 48-64).

9. As to claim 9, Nagatomo-Lincke disclose at least one of the first data source and the second data source is a database system (Nagatomo, Abstract, and col. 4, lines 48-52).

10. As to claim 10, Nagatomo-Lincke disclose at least one of the first data source and the second data source is an HTTP server (Nagatomo, col. 18, lines 49-59).

11. As to claim 11, Nagatomo-Lincke disclose the client-formatted response is an HTML document (Nagatomo, col. 18, lines 49-59).

12. As to claim 14, Nagatomo-Lincke disclose the particular type of client is a mobile phone (Lincke, col. 1, lines 30-47).

13. As to claim 15, Nagatomo-Lincke disclose the steps of receiving data that indicates user-specific customizations to services (Nagatomo, col. 7, line 15 – col. 8, line 17);

storing the data in a configuration database (Nagatomo, col. 5, lines 55-60);

searching the configuration database for the user-specific customizations in response to receiving the request for the service (Nagatomo, col. 6, lines 49-58);

the first set of parameters used to generate the request object includes the user-specific customizations (Nagatomo, col. 8, lines 5-10).

14. As to claim 16, Nagatomo-Lincke disclose wherein said one or more data sources include

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a first web site accessible through a gateway (Lincke, col. 9, lines 30-47, col. 11, lines 8-25 and col. 14, lines 48-64), and

a second web site accessible through the gateway (Lincke, col. 9, lines 30-47, col. 11, lines 8-25 and col. 14, lines 48-64); and

the step of converting said responses into said particular format includes

gateway converting a first response from the first web site to the particular format (Lincke, col. 13, lines 11-17); and

said gateway converting a second response from the second web site to said particular format (Lincke, col. 13, lines 11-17).

15. As to claim 36, Nagatomo-Lincke disclose wherein said one or more data sources include a plurality of data sources (Nagatomo discloses a server 40 (gateway) converts data from either the database 1 (first data source) or World Wide Web 50 (second data source); and

said composite response document reflects information from each of said plurality of data sources (Nagatomo, col. 6, lines 25-58 and figs. 1 and 16: server 2 converts the search result from database 1 or WWW 50 to another data format in accordance with the ability or functions of a communication terminal at the destination).

16. Claims 17, 21-24, 27-30, 33-35, and 37 are system and computer-readable medium claims containing similar limitations as the method discussed in claims 1-5, 8-11, and 14-16 above; therefore, they are rejected under the same rationale.

17. Claims 6-7, 12-13, 18-20, 25-26, and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagatomo and Lincke as discussed in claims 1-5, 8-11, 14-17, 21-24, 27-30, and 33-35 above, and further in view of Bayeh et al. (Bayeh), Patent No. 6,012,098.

18. As to claim 6, Nagatomo-Lincke disclose the step of receiving responses to said requests from said one or more data sources in one or more formats other than a particular involves receiving responses to said requests from the one or more data sources in one or more formats other than XML (Nagatomo, col. 14, line 31 – col. 16, line 9);

the step of transforming the composite response document into a client-formatted response involves transforming the composite response document into a format other than XML (Nagatomo, col. 14, line 31 – col. 16, line 9);

However, Nagatomo-Lincke do not disclose the step of converting said responses into the particular format involves converting responses into XML and the step of generating a composite response document in the particular format involves generating a composite response document in XML. In the same field of endeavor, Bayeh discloses data servlet formats query results (from a database) to an Extensible Markup Language (XML) (Abstract, col. 8, lines 3-29 and Figs. 4&5). Since Bayeh discloses a system for retrieving data and converting it to a compatible format of a requesting device, which is similar to the systems for performing conversion and edition

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on search result in accordance with ability, function, and/or capacity of the communication terminal of Nagatomo-Lincke, thus it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the teachings of Nagatomo-Lincke and Bayeh to include the step of converting said responses into the particular format involves converting responses into XML and the step of generating a composite response document in the particular format involves generating a composite response document in XML. Bayeh suggests that the proposed technique enables additional data retrieval or formatting implementations to be quickly and easily added into the computing environment, which will provide greater flexibility in the manner in which data can be presented, and which may also increase overall system throughput and alleviate potential processing bottlenecks.

19. As to claim 7, Nagatomo-Lincke and Bayeh (Nagatomo-Lincke-Bayeh) disclose wherein the step of transforming includes: identifying one or more XSL stylesheets based on said second set of parameters (Bayeh, col. 4, line 23 – col. 5, line 2 and col. 12, lines 16-36); and

applying said one or more XSL stylesheets to said composite response document (Bayeh, col. 8, line 64 – col. 9, line 24).

20. As to claim 12, Nagatomo-Lincke-Bayeh disclose wherein the step of generating a request object involves generating an XML request document that includes

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unresolved links (Nagatomo, col. 19, lines 7-19 and col. 19, line 59 – col. 20, line 15);
and

the step of transmitting requests involves resolving said unresolved links (Nagatomo, col. 19, lines 7-19 and col. 19, line 59 – col. 20, line 15).

21. As to claim 13, Nagatomo-Lincke-Bayeh disclose wherein the step of generating said composite response document involves replacing said unresolved links in said XML request document with XML data generated based on said responses from said one or more data sources (Nagatomo, col. 19, lines 7-19 and col. 19, line 59 – col. 20, line 15).

22. Claims 18-20, 25-26, and 31-32 are corresponding system and instruction claims containing the similar limitations as the methods described in claims 6-7 and 12-13; therefore, they are rejected under the same rationale.

Response to Arguments

In the remarks, Applicant argued in substance that

A. Prior art does not disclose “Converting said responses into said particular format”.

As to point (A), Nagatomo discloses in the Abstract and col. 10, line 30 – col. 11, line 35: the server receiving the results from the database 1, and performing conversion and edition on the search result in accordance with the ability (format or type of the communication terminal), function and/or capacity of the requesting communication terminal.

B. Prior art does not disclose “Generating a composite request document in said particular format”.

As to point (B), first claim 1 does not have the limitation “generating a composite request document in said particular format”, instead, claim 1 claims “generating a composite response document in said particular format”. To address this limitation, Nagatomo discloses in col. 5, line 64 – col. 6, line 2, col. 6, lines 39-42, and col. 10, line 30 – col. 11, line 35: the server 2 converts the search result to another data format (a composite response document) in accordance with the ability or functions of the communication terminal at the destination.

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C. Prior art does not disclose "Generating, based on first set of parameters, a request object".

As to point (C), Lincke discloses transmitting a first message (request) in packets of data from a client to a server, transforming the first message into a standard object data request, and transmitting the standard object data request to the source of data (col. 5, lines 9-65). Since Lincke teaches a wireless communications system providing packet minimized communications between a wireless client and a proxy server, which is similar to a process of a communication terminal when a search requester requests a search for information in a database and the search result is returned to the search requesting communication terminal of Nagatomo, thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lincke and Nagatomo to include generating a request object based on a set of parameters. Lincke suggests that generating a request object to represent a form used for querying web server.

D. None of the cited references discloses, or even suggest, the use of a request preprocessor, request processor operatively coupled to the request preprocessor, one or more gateways operatively coupled between the request processor and the data sources, and post processor operatively coupled to the request processor.

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As to point (D), Lincke discloses the proxy server 180 represents one or more computers (request preprocessor, request processor, and post processor) that convert queries from the wireless communications device 100 into queries that are compatible with Internet protocols (col. 10, line 66 – col. 11, line 26).

E. Prior art does not teach or in any way suggest employing a second set of criteria to filter data that originated from the data source.

As to point (E), Nagatomo discloses in col. 2, lines 9-34, col. 7, line 55 – col. 8, line 17, and col. 10, line 35 – col. 11, line 25: upon reception of the terminal ID code and program number (a second set of criteria) from each communication terminal, the server 2 can know the terminal ID code and program number of the communication terminal to which the search result should be sent to.

F. Prior art does not teach said first set of parameters for generating said request includes identity of said particular user

As to point (F), Nagatomo discloses the use of a terminal ID code to represent the ability of the communications terminal to present the search result, and the use of a program number to represent the functions that the communications terminal carry out. Also, terminal ID and the program number identify the client as described in Fig. 1 as

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PC 4, PDA 5, or mobile phone 6, and thus the terminal ID and program number identify of a particular user of client.

G. Nothing in prior art indicates or even suggests that two separate and structurally different data sources.

As to point (G), Nagatomo discloses a server 40 (gateway) converts data from either the database 1 (first data source) or World Wide Web 50 (second data source) (Figs. 1 and 16, col. 5, line 64 – col. 6, line 2, col. 6, lines 39-42, col. 10, line 30 – col. 11, line 35, and col. col. 18, lines 25-67: the server 2 converts the search result to another data format in accordance with the ability or functions of the communication terminal at the destination).

H. Prior art does not suggest that user-specific customization information is stored in a configuration database.

As to point (H), Nagatomo discloses ID code (user-specific customization information) table 221 provided in the access terminal memory 22 (configuration database), which is located in the server 2.

I. Prior art does not disclose a document in an XML format

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As to point (I), Bayeh discloses data servlet formats query results (from a database) to an Extensible Markup Language (XML) (Abstract, col. 8, lines 3-29 and Figs. 4&5).

23. Applicant's arguments and amendments filed on 08/21/2003 have been fully considered but they are not deemed fully persuasive. Please see the response to arguments above.

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THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau Nguyen whose telephone number is (703) 305-4639. The examiner can normally be reached at 8:00 am – 5:00 pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (703) 305-9792. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3230.

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Any response to this final action should be mailed to:

Box AF

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Washington, D.C. 20131

Or Faxed to:

(703) 872-9306, (for **formal communications**; please mark
"EXPEDITE PROCEDURE").

Or:


(703) 746-7240 (for **informal or draft communications**, please label
"PROPOSED" or "DRAFT").

Or:

(703) 872-9306 (for **After Final Communications**).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal
Drive, Arlington, VA., Sixth Floor (Receptionist).

Chau Nguyen
Patent Examiner
Art Unit 2176



SANJIV SHAH
PRIMARY EXAMINER